

ABSTRACT

After the plural marks are picked-up by the image pick-up system AS under the image pick-up condition including the plural defocus states, the relationship between the picked-up image of the mark and the defocus amount is obtained. The relationship is the manner in the change of the picked-up image of the mark depending on the varied defocus amount. From the relationship between the obtained picked-up image of the mark and the defocus amount, the positional information of the mark is estimated. That is, the positional information of the mark is that should be obtained by using the image of the mark at the focus state. As a result, even when the contrast between the line pattern portion and the space pattern portion in the picked-up image of the mark at the focus state is low, the positional information of the mark is precisely detected.